



p7.5tk

7.5 k promoter

Not I Apa I

GGCCAAAATTGAAAAAAGTAGATCTATTATTGACACGCGGCGCGCCCATG GGC CCG GCC GCC AAC GGC GGA

Met Gly Pro Ala Ala Asn Gly Gly

tk coding sequence

pE/Ltk

synthetic E/L promoter

Not I Apa I

GGCCAAAATTGAAAATTTTATTTTTTTTGGATATATAAGCGGCGCGCCCATG GGC CCG GCC GCC AAC GGC GGA

Met Gly Pro Ala Ala Asn Gly Gly

tk coding sequence

FIG. 1



1. p7.5tk

7.5K PROMOTER NOTI APAI
5'-GGCCAAAATTGAAAACTAGATCTATTATTGCACGGCGGCCCATGGGCCCCGGCC-3'

2. p7.5/ATG0/tk

7.5K PROMOTER NOTI BAMHI SMAI PSTI
5'-GGCCAAAATTGAAAACTAGATCTATTATTGCACGGCGGCCGTGGATCCCCGGGCTGCAGGAA

	TRANSLATION	TRANSCRIPTION
SALI	STOP CODONS	STOP SIGNAL
TTCGATATCAAGCTTATCGATACCGTCGACCTCGAGGGGGGCCCTAACTAAATTGTTTGTGT		

APAI

GGGCCCCGGCC-3'

FIG. 2A



3. p7.5/ATG1/tk

	START	
7.5K PROMOTER		CODON BAMHI SMAI PSTI
5'-GGCCAAAATTGAAAACTAGATCTATTTATTGCACGGCGCGCCc		ATG
		GTGGATCCCCCGGGCTGCAGGAA

	TRANSLATION	TRANSCRIPTION
SALI	STOP CODONS	STOP SIGNAL
TTCGATATCAAGCTTATCGATACCGTCGACCTCGAGGGGGCCCTAACTAAATTTGTTTGT		

APAI

GGGCCCCGGCC -3'

FIG. 2B



4. p7.5/ATG2/tk

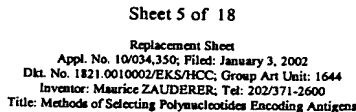
	7.5K PROMOTER	NOTI	START	CODON	BAMHI	SMAI	PSTI
5'-	GGCCAAAATTGAAAACTAGATCTATTATTGACGGGGCCGCCc	ATG	AGTGGATCCCCGGGCTGCAGGAA				

	SALI	TRANSLATION	TRANSCRIPTION
	TTCGATATCAAGCATTATCGATACCGTCGACCTCGAGGGGGGCCCTAACTAAATTTGTTTGT	STOP CODONS	STOP SIGNAL

APAI

GGGCCCCGGCC-3'

FIG. 2C



START

NOTI

CODON

BAMIHI SMAI

PSTI

5'- GGCCAAAAATTGAAAACTAGATCTATTTATTGCACGGCGCCCAATGACGTGGATCCCCCGGCTGCAGGAA

SALI

TRANSLATION

TRANSCRIPTION

STOP CODONS

STOP SIGNAL

TTTCGATATCAAGCTTATCGATACCGTGACCTCGAGGGGGCCTAACCTAAATTGTTTTTGT

APAI

GGGCCGCC-3'

FIG. 2D

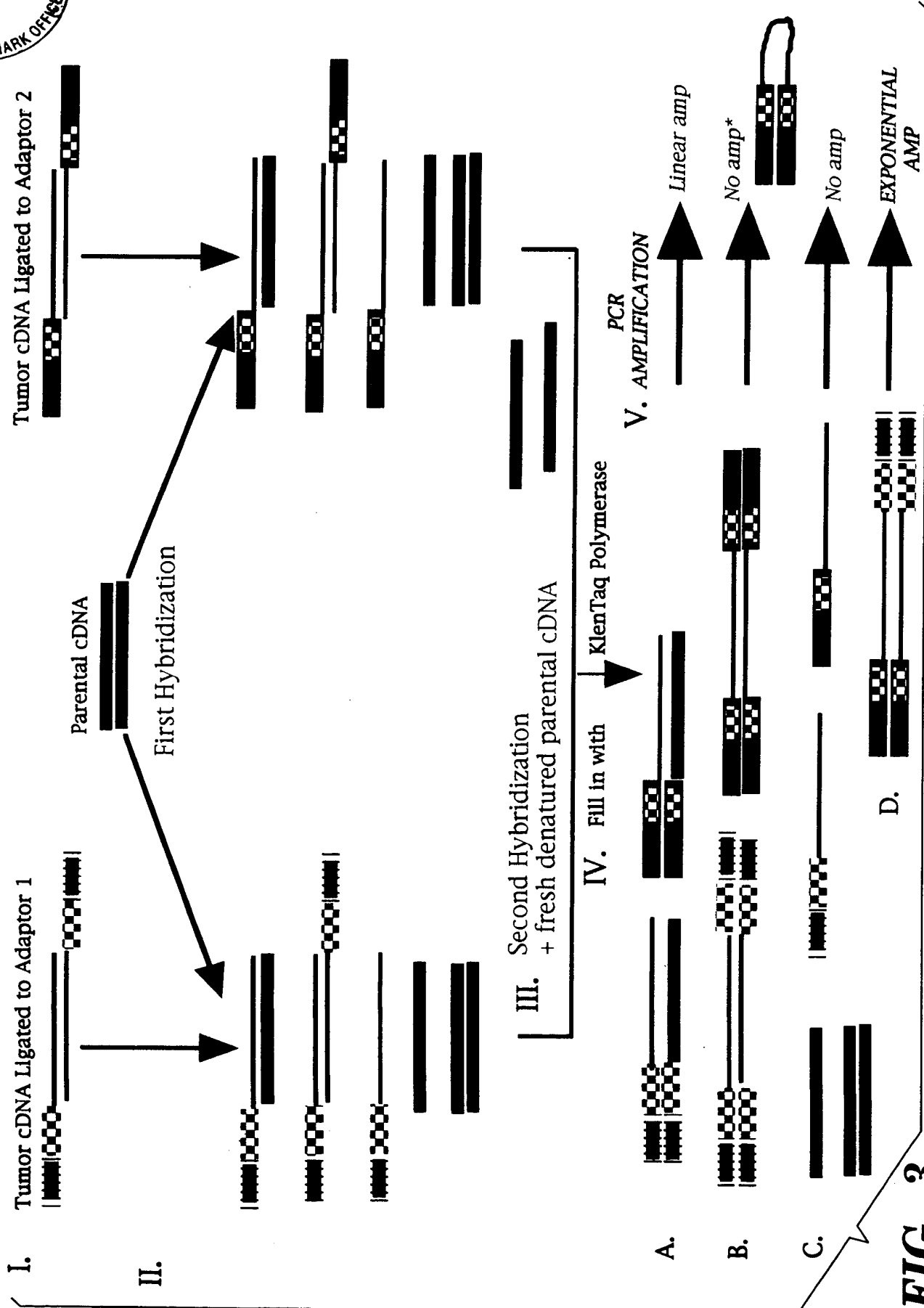


FIG. 3

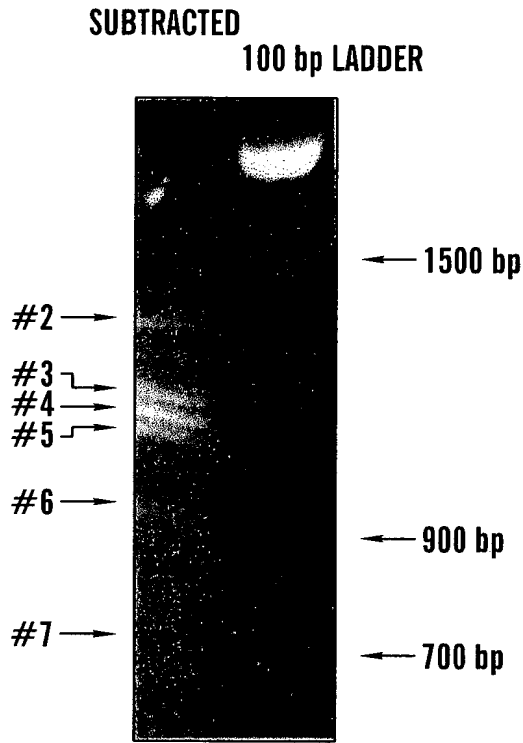


FIG. 4

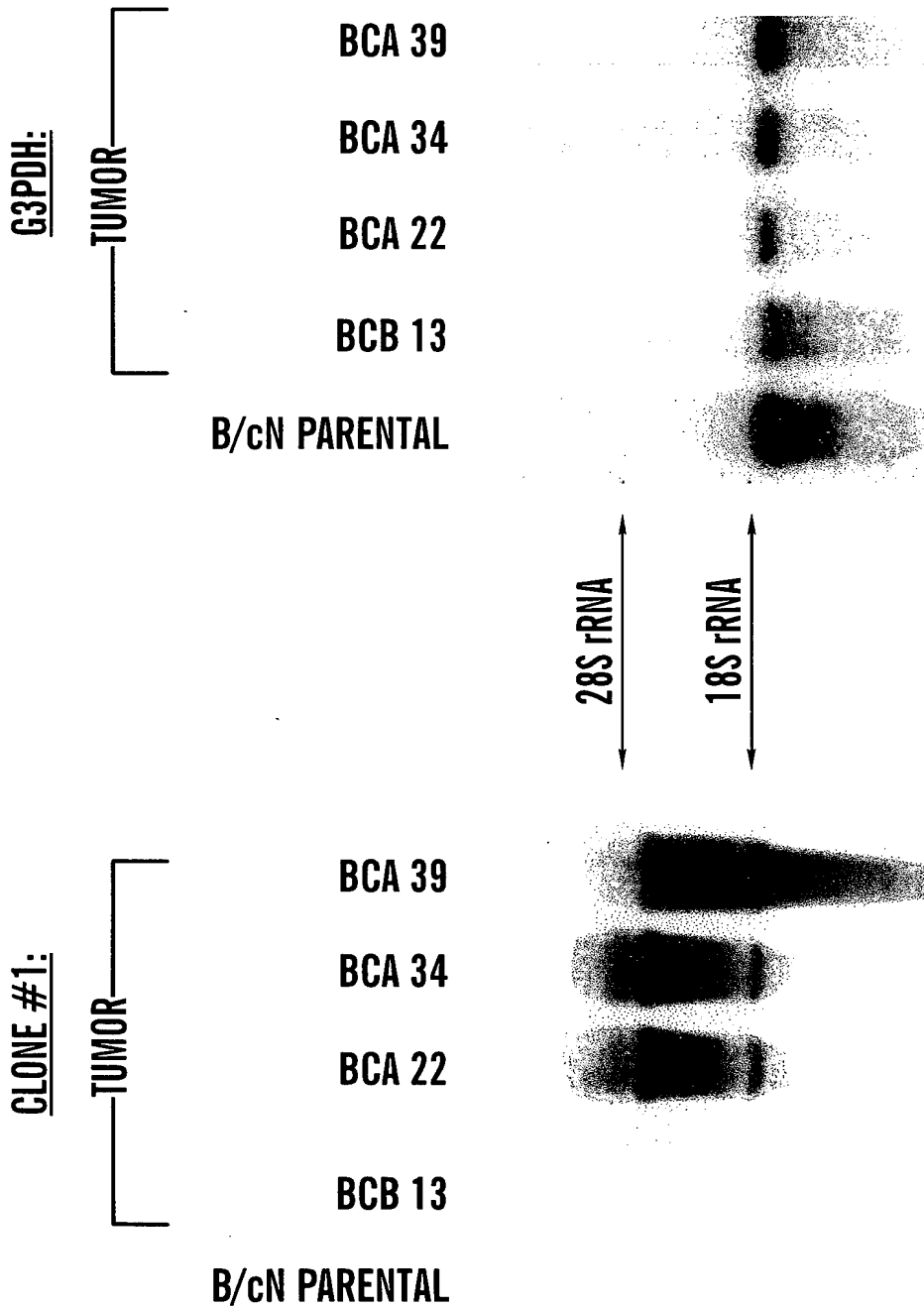


FIG. 5

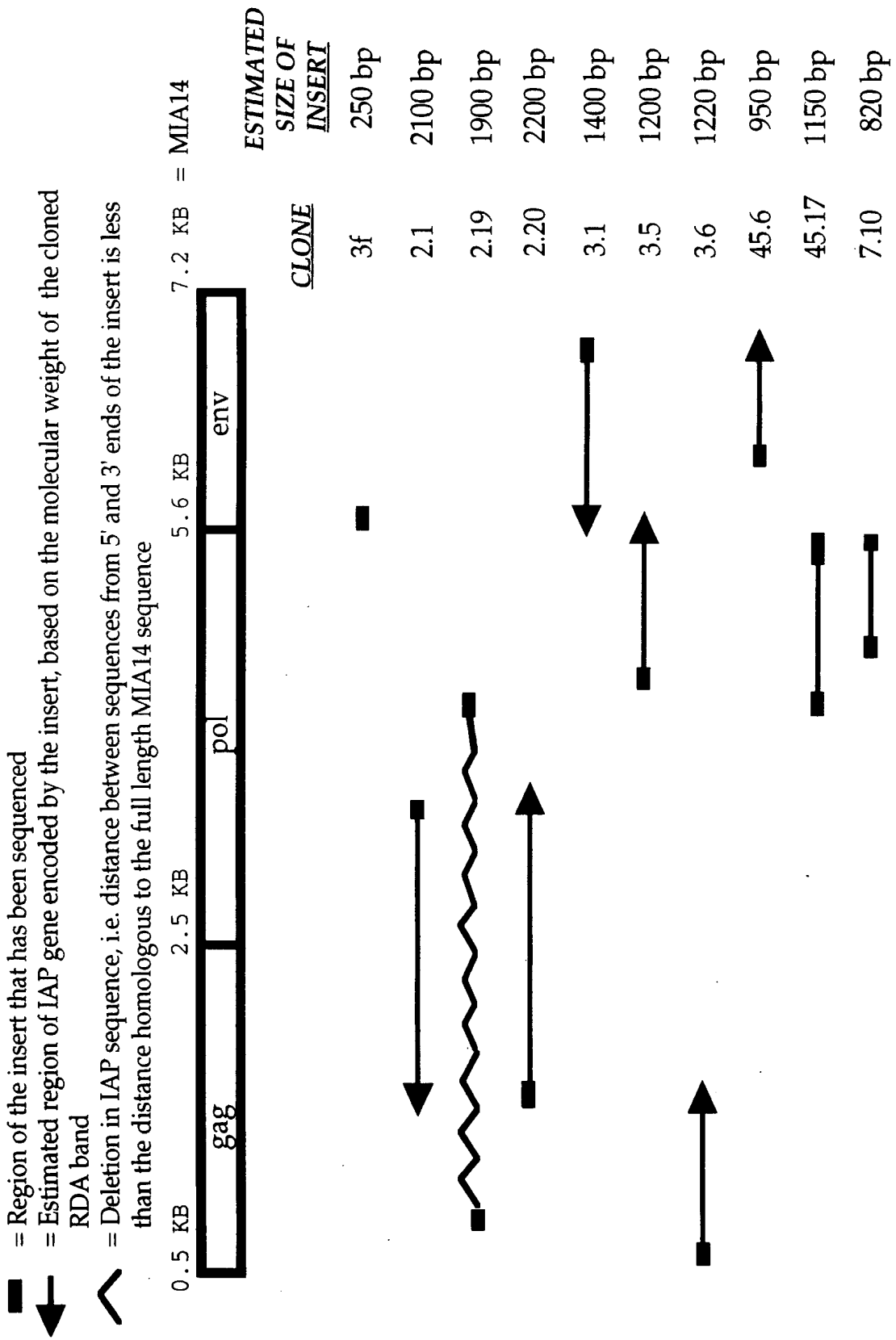


FIG. 6

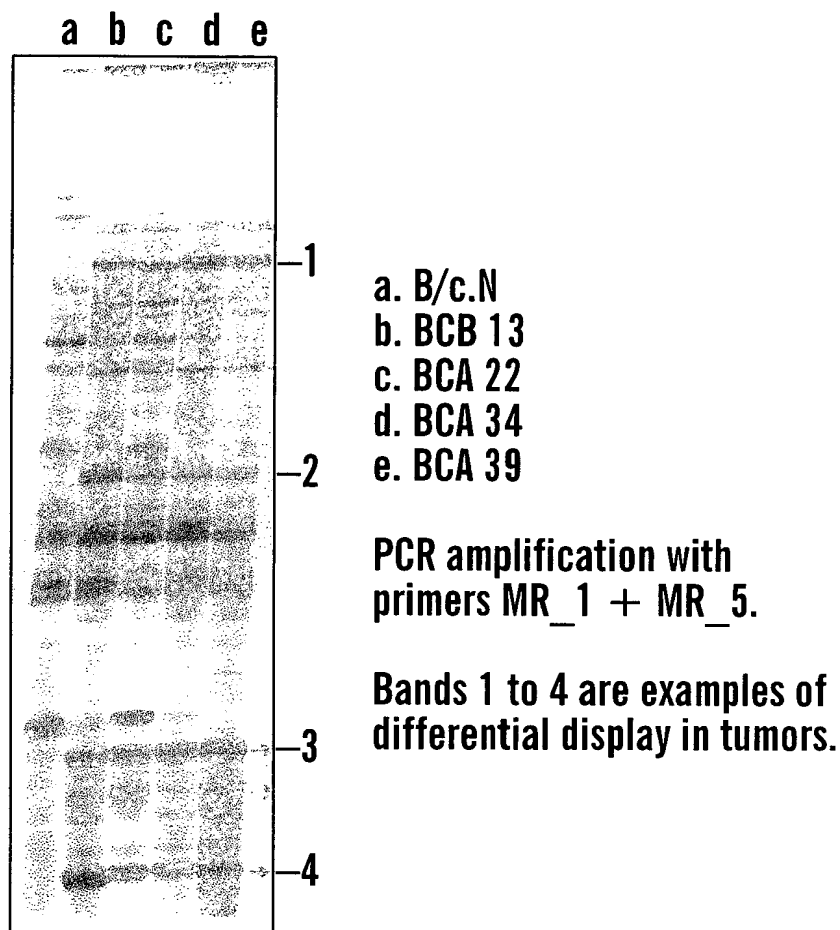


FIG. 7

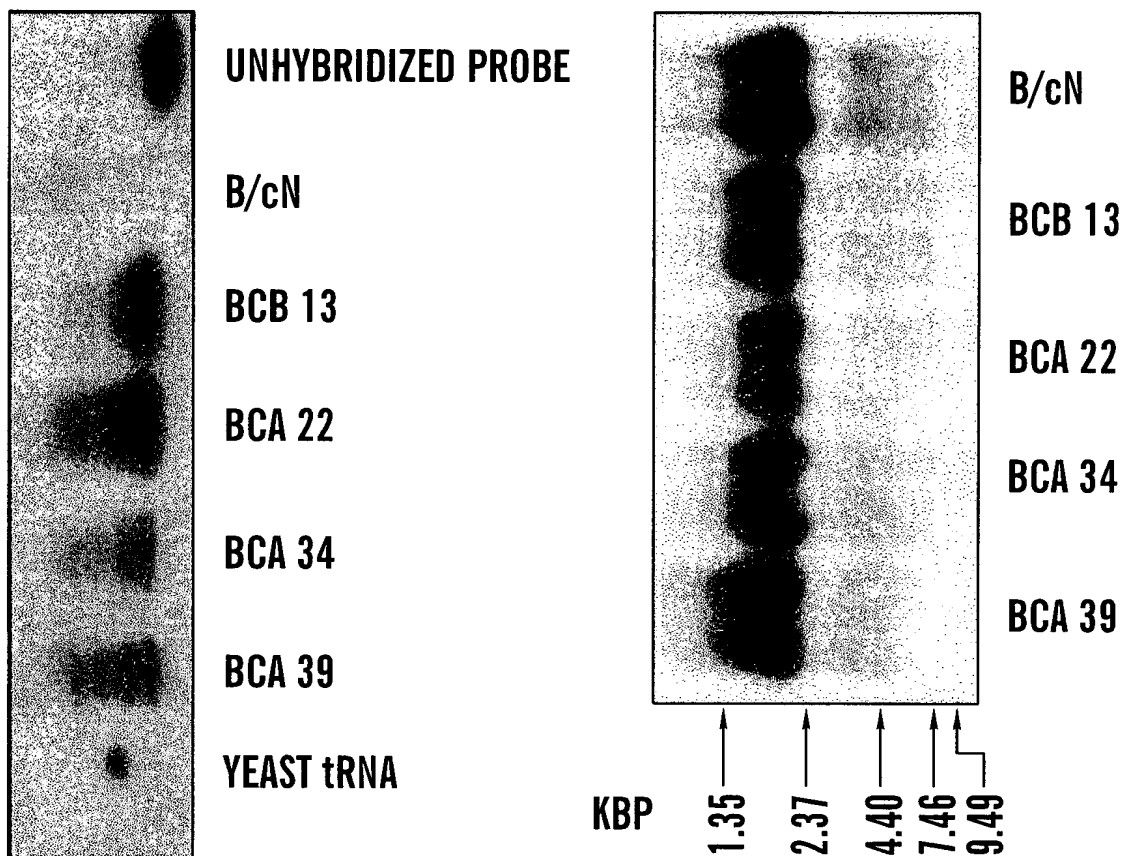


FIG. 8A

FIG. 8B

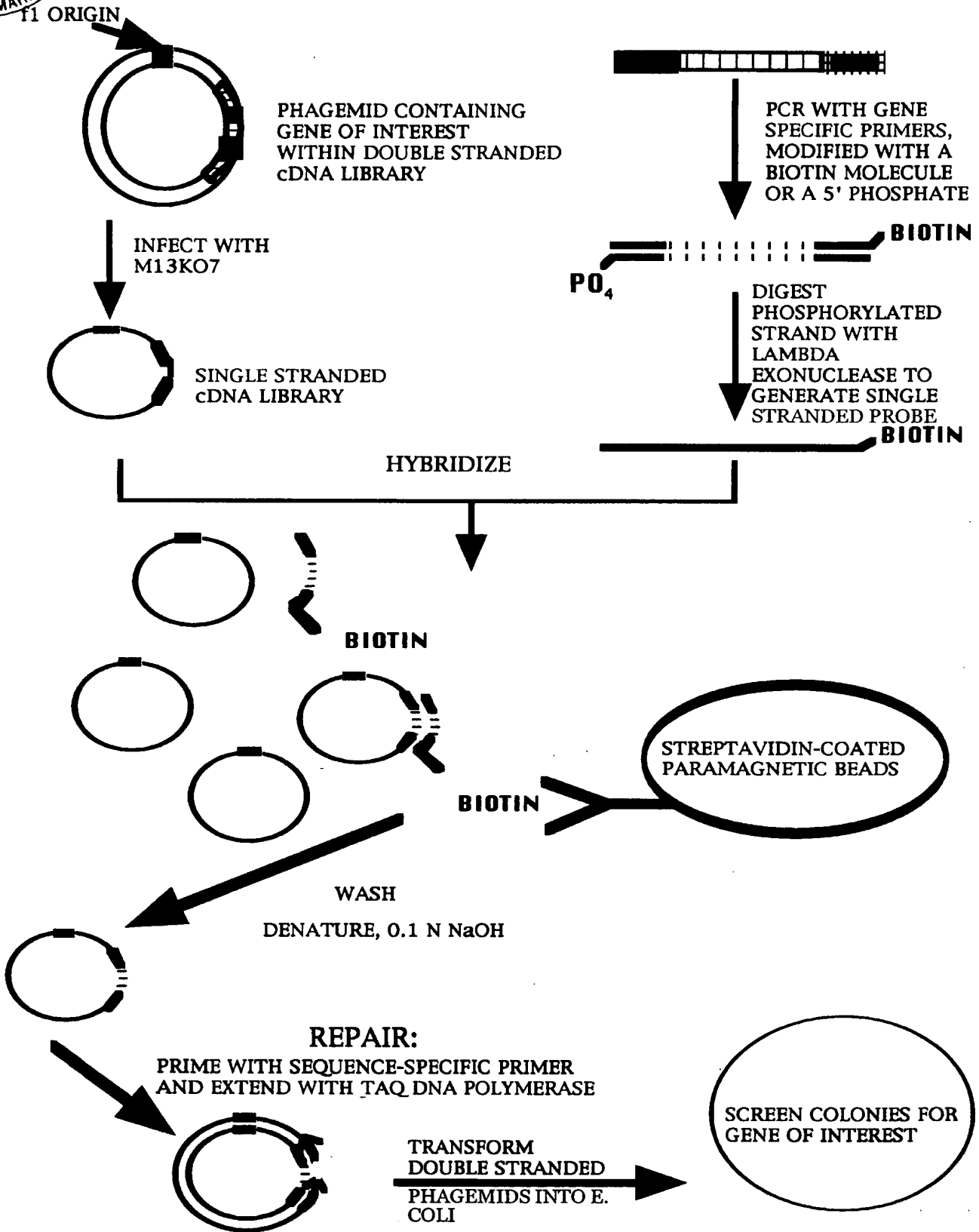


FIG. 9



Apal

NotI

λ WR WR vEL v7.5 vNotI/tk WR vEL v7.5 vNotI/tk

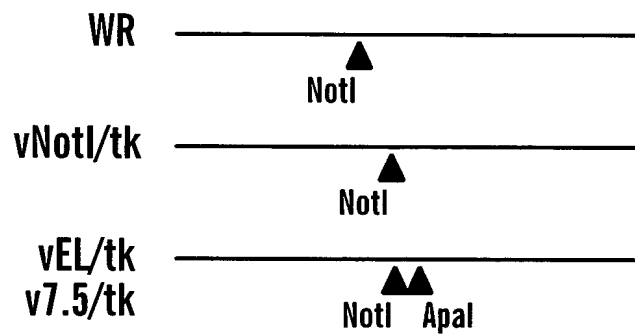
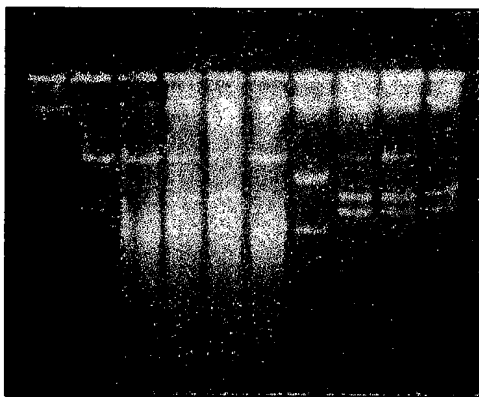


FIG. 10

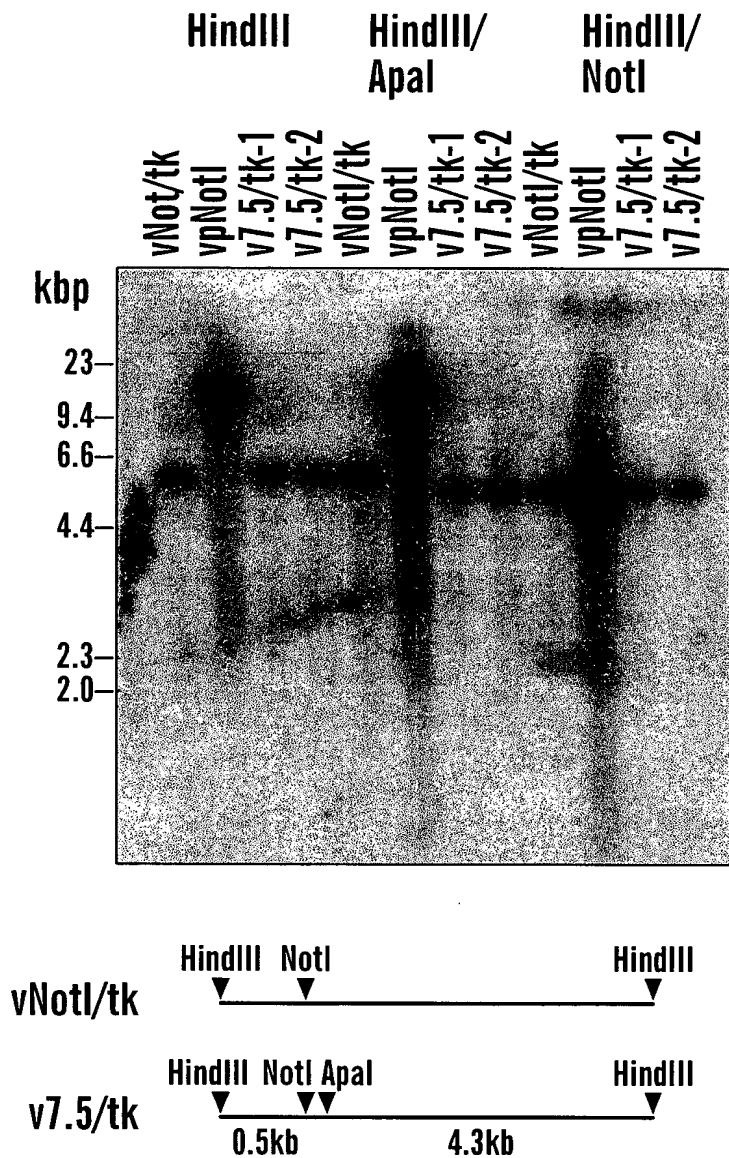


FIG. 11A

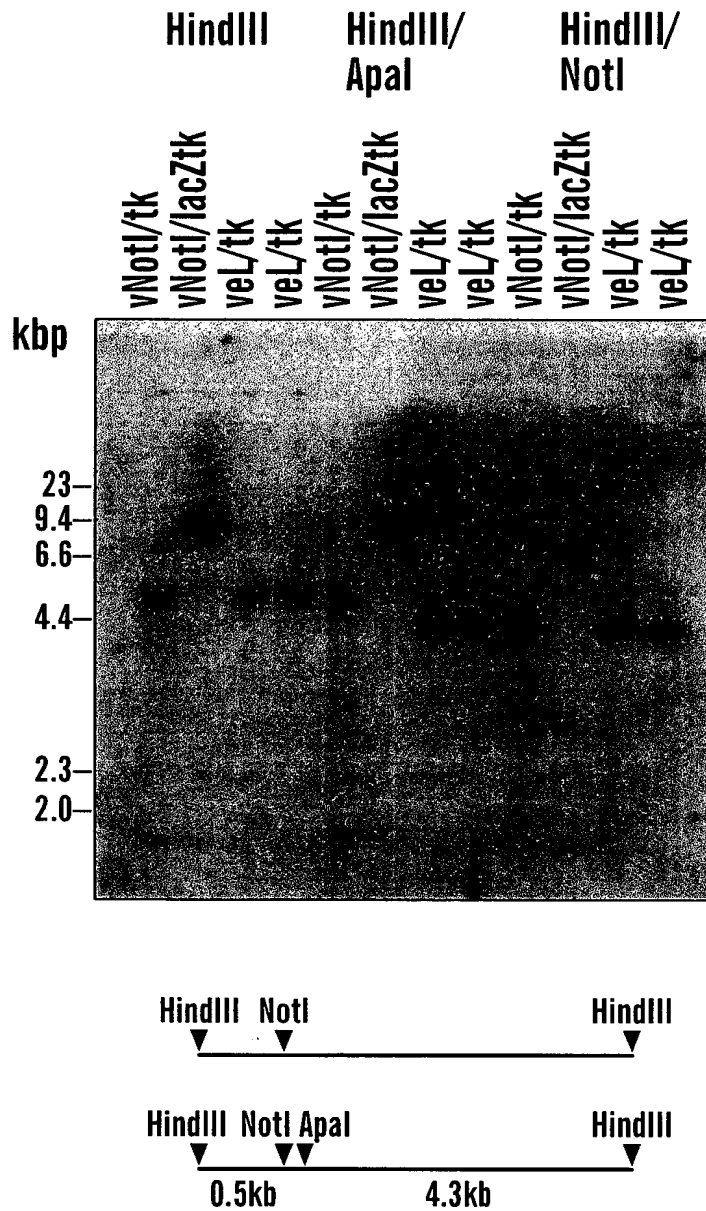


FIG. 11B



Phi X
 WR
 pJNot
 vNotI/tk
 vpNotI
 p7.5/tk
 v7.5/tk
 vNotI/lacZ/tk
 peL/tk
 veL/tk

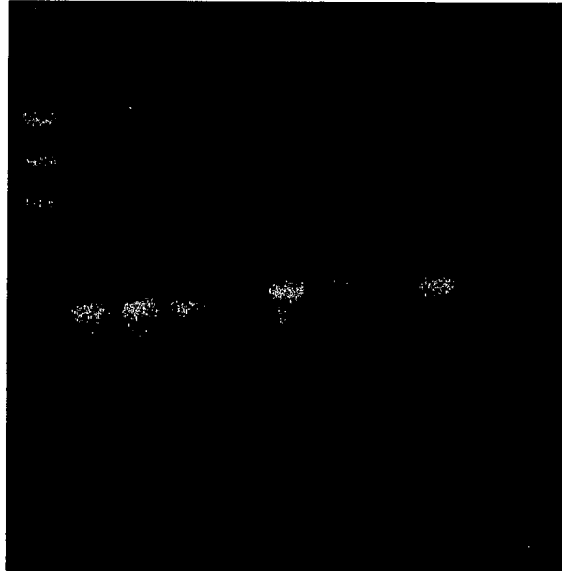


FIG. 12

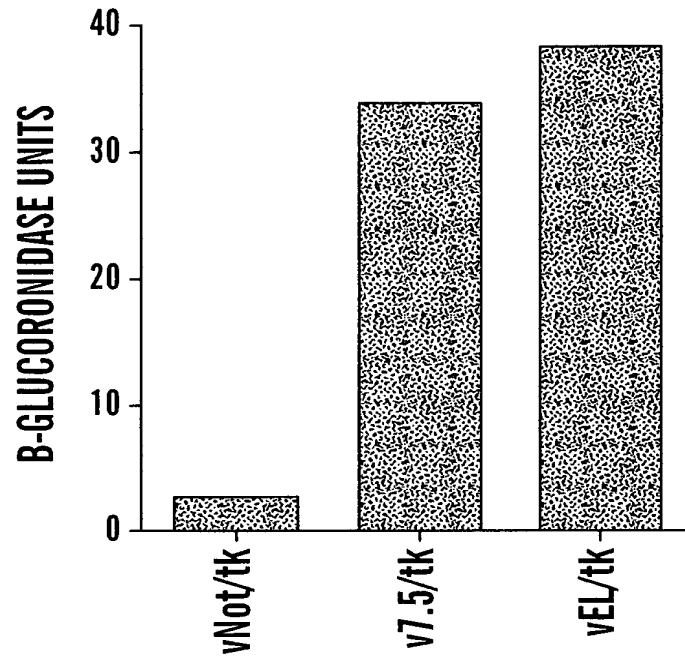


FIG. 13



HAT	125mM BuDR	125mM BuDR	NO DRUG
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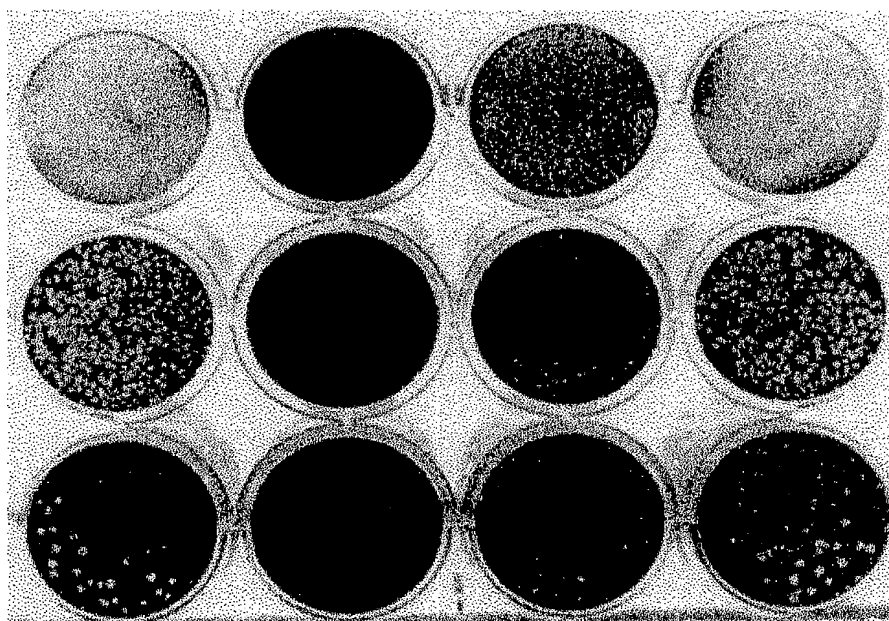


FIG. 14